

[Search Forms](#)  
[Search](#)  
[Results](#)  
[Help](#)  
[User Searches](#)  
[Preferences](#)  
[Logout](#)

## Refine Search

### Search Results -

| Terms                    | Documents |
|--------------------------|-----------|
| L5 same (drug screening) | 0         |

**Database:**  
 US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

**Search:** L6

### Search History

**DATE:** Thursday, January 11, 2007    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

| <u>Set Name</u>                                    | <u>Query</u>                             | <u>Hit Count</u> | <u>Set Name</u> |
|--|--|------------------|-----------------|
| side by side                                       |  |                  | result set      |
| DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ |  |                  |                 |
| <u>L6</u>  | L5 same (drug screening)                 | 0                | <u>L6</u>       |
| <u>L5</u>  | L2 same (diabetes)                       | 2                | <u>L5</u>       |
| <u>L4</u>  | L1 same (diabetes)                       | 31               | <u>L4</u>       |
| <u>L3</u>  | L2 same (lpf1 promoter or pdx1 promoter) | 2                | <u>L3</u>       |
| <u>L2</u>  | L1 same (transgenic)                     | 4                | <u>L2</u>       |
| <u>L1</u>  | (GPR40)                                  | 59               | <u>L1</u>       |

END OF SEARCH HISTORY

L5

6 L4 AND PY<=2003

=> d his

(FILE 'HOME' ENTERED AT 17:42:22 ON 11 JAN 2007)

FILE 'MEDLINE, AGRICOLA, CAPLUS, SCISEARCH, BIOSIS' ENTERED AT 17:42:50  
ON 11 JAN 2007

L1 177 S (GPR40)  
L2 1 S L1 AND (TRANSGENIC OR KNOCKOUT OR GENE DISRUPTION)  
L3 58 S L1 AND (DIABETES)  
L4 39 DUP REM L3 (19 DUPLICATES REMOVED)  
L5 6 S L4 AND PY<=2003

=> d l2 ti so au ab

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Medium and long chain fatty acids and eicosanoids activate G protein-coupled receptor GPR40 and regulate insulin secretion from pancreatic  $\beta$  cells  
SO PCT Int. Appl., 257 pp.  
CODEN: PIXXD2  
IN Hinuma, Shuji; Hosoya, Masaki; Ito, Yasuaki; Kobayashi, Makoto; Tanaka, Hideyuki; Okubo, Shoichi; Fujii, Ryo; Kizawa, Hideki; Kawamata, Yuji; Ogi, Kazuhiro; Harada, Masataka; Fukusumi, Shoji  
AB Use of (1) a G protein-coupled receptor and (2) a fatty acid or an eicosanoid for screening compds. capable of modulating the binding of the above receptor-ligand interactions, as drug candidates or diagnostic agents, is disclosed. Use of mammals, rodents in particular, more specifically mouse or rat and their ES cells, transformed with a GPR40 expression construct or GPR40 gene knockout reporter gene expression construct, for drug screening is claimed. Use of antibodies or siRNA specific to GPR40 or encoding gene for diagnosis or therapy is also claimed. Ligand fishing expts. in HEK293 cells expressing human GPR40 revealed that a range of saturated and unsatd. carboxylic acids with carbon chain lengths greater than six were able to induce an elevation of  $[Ca^{2+}]_i$ , measured using a fluorometric imaging plate reader. Expression anal. by quant. reverse transcription-PCR showed that GPR40 was specifically expressed in pancreas, with expression in rodent pancreas being localized to insulin-producing  $\beta$ -cells. A G-protein-coupled receptor, GPR40, which is abundantly expressed in the pancreas, functions as a receptor for long-chain free fatty acids (FFAs). Furthermore, the authors show that long-chain FFAs amplify glucose-stimulated insulin secretion from pancreatic  $\beta$  cells by activating GPR40. The authors' results indicate that GPR40 agonists and/or antagonists show potential for the development of new anti-diabetic drugs. The authors also cloned GPR40 cDNA from rat, mouse, monkey, and hamster.

=> d 15 1-6 ti so au ab pi



A service of the National Library of Medicine  
and the National Institutes of Health

My NCBI  
[Sign In] [Regi...]

All Databases PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search **PubMed**

for

[Preview](#) [Go](#)

[Clear](#)

Limits [Preview/Index](#) [History](#) [Clipboard](#) [Details](#)

### Limits: Entrez Date to 2003/08/18

- Search History will be lost after eight hours of inactivity.
- Search numbers may not be continuous; all searches are represented.
- To save search indefinitely, click query # and select Save in My NCBI.
- To combine searches use #search, e.g., #2 AND #3 or click query # for more options.

[About Entrez](#)

[Text Version](#)

[Entrez PubMed](#)

[Overview](#)

[Help | FAQ](#)

[Tutorials](#)

[New/Noteworthy](#)

[E-Utilities](#)

[PubMed Services](#)

[Journals Database](#)

[MeSH Database](#)

[Single Citation Matcher](#)

[Batch Citation Matcher](#)

[Clinical Queries](#)

[Special Queries](#)

[LinkOut](#)

[My NCBI](#)

| Search   | Most Recent Queries | Time     | Result              |
|--|---------------------|----------|---------------------|
| <a href="#">#9 Related Articles for PubMed (Select 12629551)</a>                   |                     | 17:31:48 | <a href="#">137</a> |
| <a href="#">#8 Search (GPR40) and (diabetes) Limits: Entrez Date to 2003/08/18</a> |                     | 17:30:15 | <a href="#">1</a>   |
| <a href="#">#7 Search (GPR40) and (diabetes)</a>                                   |                     | 17:29:36 | <a href="#">7</a>   |
| <a href="#">#6 Search (GPR40) and (transgenic or knockout)</a>                     |                     | 17:29:02 | <a href="#">0</a>   |
| <a href="#">#5 Search (GPR40) and (transgenic)</a>                                 |                     | 17:27:58 | <a href="#">0</a>   |
| <a href="#">#1 Search GPR40</a>  |                     | 17:19:05 | <a href="#">30</a>  |

[Related Resources](#)

[Order Documents](#)

[NLM Mobile](#)

[NLM Catalog](#)

[NLM Gateway](#)

[TOXNET](#)

[Consumer Health](#)

[Clinical Alerts](#)

[ClinicalTrials.gov](#)

[PubMed Central](#)

[Clear History](#)

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Dec 18 2006 06:34:27